

## MATHEMATICS—Changing teacher's beliefs

Subject	Title	Author	Abstract	Source	Publisher
Changing teacher's beliefs about technology	Factors Related to Technology Use by Secondary Geometry Teachers	Coffland	The purpose of this study was to identify factors related to technology use by secondary geometry teachers from four primary variables: teacher technology awareness, teacher technology training, teacher attitude toward technology, and teacher computer use. This study also tested for associations between these primary variables and attitude of school principals toward technology and a selected group of demographic variables.	Dissertation	Idaho State University 0162. Year: 1999.
Changing teacher's beliefs about technology	An Analysis of the Perceived Impact of Computing Devices on Calculus Instruction in Engineering Curricula	Rochowicz	Perceptions of calculus instructors concerning the impact of computing technology use on specific topics of calculus, how these topics are taught, student motivation, student learning, and the role of the teacher were analyzed. This study provided evidence that reform is taking place in many aspects of the calculus curricula; computers and calculators are being used; and the use of these technologies is having an impact on calculus instruction.	Dissertation	Lehigh University 0105. Year: 1993.
Changing teacher's beliefs about technology	A Study of the Implementation of a Distributed Computer Network in an Elementary School	Somers	This descriptive study investigated the implementation of a distributed computer system in an elementary school by studying the use of seven categories of interventions: creating a vision, establishing goals, encouraging integration, staff development, assessing progress, continuous assistance, and the change process. The insights and understandings developed during this study led to recommendations for others interested in innovation implementation, for the study site, for higher education, and for further research."	Dissertation	Baylor University 0014. Year: 1994

## MATHEMATICS—Changing teacher's beliefs

Subject	Title	Author	Abstract	Source	Publisher
Changing teacher's beliefs about technology	The Role of Educational Goals in the Selection and Use of Microcomputers in Elementary & Secondary Schools	Bailey	This study used questionnaire instruments to identify educational goals in selected school systems and to determine whether these goals contributed to the selection, use, and effectiveness of the microcomputer. Significant relationships were found between rankings of goals for the selection of microcomputers and rankings of the actual use and the perceived effectiveness in the classroom. The results of this research indicate substantial integration of microcomputers into the curriculum.	Dissertation	1986
Changing teacher's beliefs about technology	The Shape of Things To Come	Hallenbeck	Two teachers describe how they used computer software to teach geometric reasoning to elementary students. Collaboration and mentoring was used to teach 2-dimensional geometry while learning a new computer program. The research-based text consists of computer skills that, along with classroom discourse, develop student thinking about geometric shapes. The computer-aided geometry unit was a learning experience for students and confirmed for these two teachers that a mentoring relationship is a 2-way street.	6(3)	ENC Focus
Changing teacher's beliefs about technology	Intuition and Research: Are They Compatible	Dorward	Use of Computer Based Manipulatives: Increased availability of computer-based manipulatives and activities has generated opinion and research on their use in mathematics instruction. When teachers reflected on findings regarding students using the virtual manipulatives, their comments focused on observed improvement in student motivation and attitudes.	NCTM	Teaching Children Mathematics, 2002.

## MATHEMATICS—Changing teacher's beliefs

Subject	Title	Author	Abstract	Source	Publisher
Changing teacher's beliefs about technology	Technological innovation in a high school mathematics department: a structural and cultural analysis	Allum, Keith	The main body of research examines a suburban New Jersey public high school mathematics department and its efforts to integrate computer-based technologies into the curriculum. Integration is defined as classroom use of computer technology in the presentation of traditional mathematics subject matter. Innovation refers to the social processes driving integration.	Dissertation	Princeton University 0181. Year: 1991
Changing teacher's beliefs about technology	Exploring Secondary Mathematics Teacher's Reasons for Not Using Computers in Their Teaching: Five Case Studies	Noton, Stphen; McRobbie, Cambell J.; Cooper, Tom J.	This study reveals that teacher resistance to computers was related to their beliefs about mathematics teaching and learning and their existing pedagogies.	Fall 200, v. 33, n. 1	Journal of Research on Computing in Education